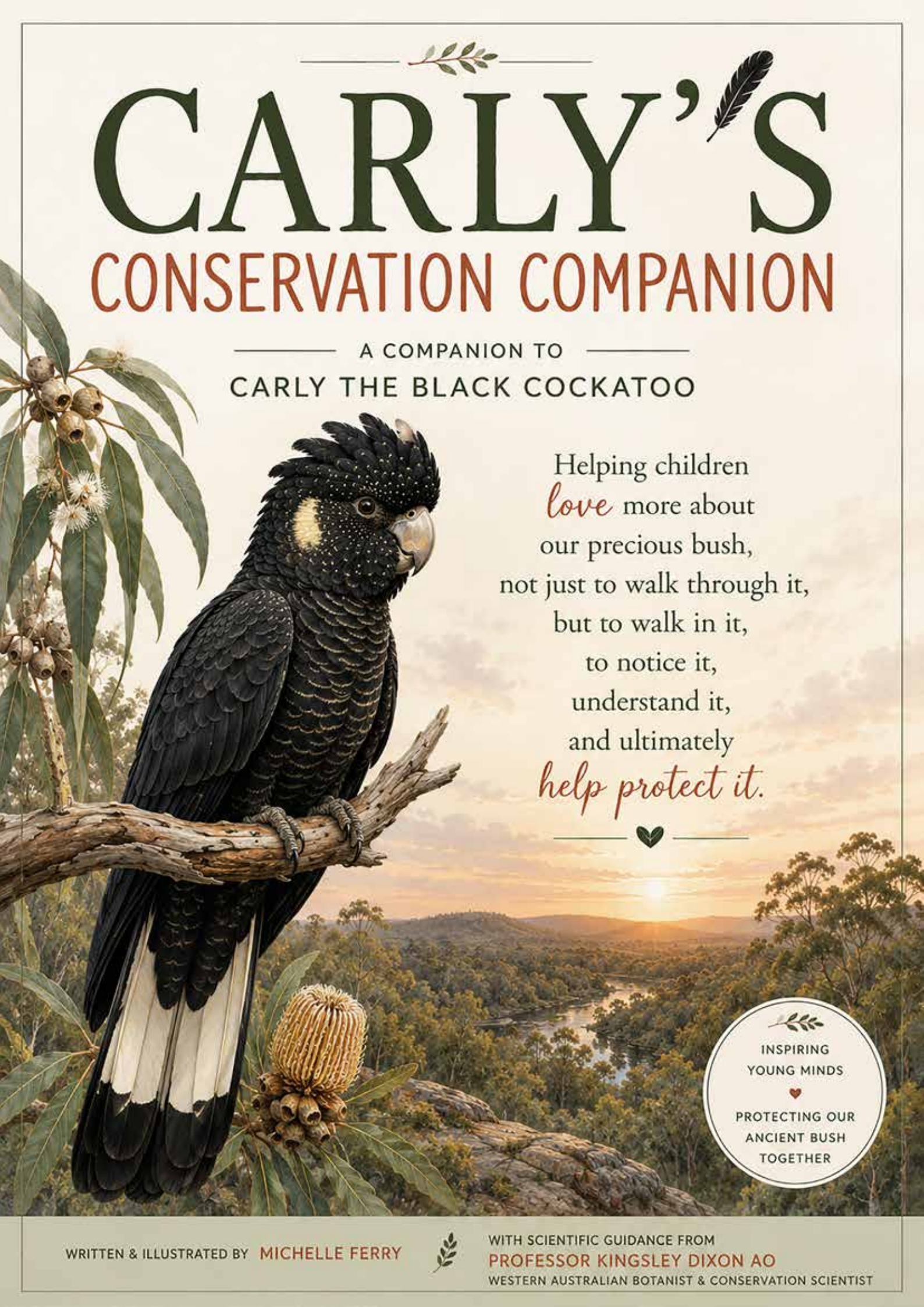




CARLY'S

CONSERVATION COMPANION

A COMPANION TO
CARLY THE BLACK COCKATOO



Helping children
love more about
our precious bush,
not just to walk through it,
but to walk in it,
to notice it,
understand it,
and ultimately
help protect it.



INSPIRING
YOUNG MINDS

PROTECTING OUR
ANCIENT BUSH
TOGETHER

WRITTEN & ILLUSTRATED BY MICHELLE FERRY



WITH SCIENTIFIC GUIDANCE FROM
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WESTERN AUSTRALIAN BOTANIST & CONSERVATION SCIENTIST



A Note for Parents, Guardians & Teachers

This activity guide is designed to encourage curiosity, observation and meaningful conversations about the natural world.

Through puzzles, observation challenges, drawing activities and hands-on investigations, children discover how ancient habitat trees support wildlife and why protecting them matters.

Children will explore:

- Carnaby's Black Cockatoos
 - Ancient habitat trees
 - Australian wildlife
- Bushland observation skills
- Conservation and caring for nature
- Critical thinking and problem-solving
- Environmental stewardship

Recommended for ages 6–10

We hope this guide inspires young Bushland Guardians to notice, explore and protect the natural world around them.

Sharing Carly's Conservation Companion

© 2026 Michelle J Ferry.

This guide was created to help children discover the wonder of Australia's bush and the importance of protecting Carnaby's Black Cockatoos and their habitat.

You are warmly encouraged to share this guide with children, families, schools, libraries and conservation groups for educational and non-commercial use. Please keep the guide complete and acknowledge the author when sharing.

The guide may not be altered, sold or reproduced for commercial purposes without written permission.

If this Conservation Companion inspires even one child to look at an old tree differently, not just as a tree but as a home worth protecting, then it has achieved its purpose.

WELCOME TO CARLY'S WORLD

Put on your explorer's hat and grab your pencil!
This is your official field guide to Carly's world.

Follow Carly through the bush to uncover amazing discoveries, solve bushland mysteries and become a Bushland Guardian.



Read Carly's story.



Look for clues
in the bush
(like chewed nuts!)



Complete each
challenge to become
a Bushland
Guardian!



Gear up!
You are ready to
tackle the
challenges ahead.

THE TWO BIG BUSHLAND DISCOVERIES

"Every giant tree began as a tiny seed..."

1. Discovery #1 THE ANCIENT TREE HOLLOW

A modern house can be built in less than 2 years.

How long do you think it takes for a tree to grow a safe nesting hollow for a Carnaby's Black Cockatoo?

My Guess: _____ years.



Grandfather's Wisdom

The large tree hollows that Carnaby's Black Cockatoos need take at least 200 years to form. Why? Because Carly has to climb down inside, turn around, and still have plenty of room to raise her chicks.



2. Discovery #2 THE BUSHLAND HIGH-RISE APARTMENT

An old tree with peeling bark and hollow branches might look empty. But it's really a busy apartment building for wildlife!

Even after a tree dies, it can provide homes for animals for many years.

How many different kinds of Australian animals do you think live in one habitat tree?

My Guess: _____ different kinds.



Grandfather's Wisdom

"Incredible, isn't it? Over 80 different animal species can share just one old tree! From tiny microbats snoozing under the bark to owls, possums, and cockatoos... it really is a bustling bushland high-rise!"



Let's explore, learn
and protect together!
-Grandfather

MISSION 1

THE ANCIENT TREE

How Long Does It Take a Tree to Grow Carly's Nest?



Tree hollows don't appear overnight. They are created slowly by weather, fungi, and insects over a very long time!

Remember Grandfather's Wisdom?

How old did Grandfather say Carly's nest home is?

- ☐ 20 years ☐ 50 years
☐ 120 years ☐ Over 200 years



HOW A NESTING TREE GROWS

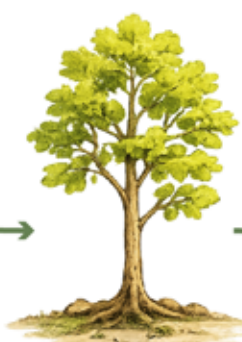
"Every giant tree began as a tiny seed..."



Tiny Seed
A little seed lands in the bush.



Young Sapling
It starts to grow and reach for the sun.



Young Tree
It grows taller every year.



Ancient Hollow Tree
An old tree develops large, deep hollows perfect for wildlife nests.



Carly's Nest
Carly hatched safely inside this hollow.



Explorer Challenges

1. HISTORY DETECTIVE



Ask a grandparent, parent, or teacher what the world was like when they were your age.

Write down one thing people used back then that we still use today, and one thing that has completely changed!

What stayed the same?

What changed?

2. MATH CHALLENGE



An old tree began growing in the year 1900. Grandfather says a large nesting hollow takes at least 200 years to develop.

Answer: In what year could the first Carnaby's Black Cockatoo hatch in that tree?



3. THINK & DRAW



What helps a tree grow?

Carly's giant tree didn't grow all by itself.

Draw the things that help a tree grow big and strong.

MY TREE HELPERS



FOREST DISCOVERY

Did you know forests have two amazing superpowers? Young trees are quietly becoming the forests of tomorrow, while old trees are busy sheltering wildlife today.

A healthy forest needs both to survive!

"Amazing, right?
Carly's tree was already growing when your great, great, great, great, great, great grandparents were children!"



GRANDFATHER

MISSION 2

THE BUSH HIGH-RISE

Meet the Neighbours!

Old trees are nature's apartment buildings. More than 80 Australian animal species depend on them for food, shelter and nesting places.



GRANDFATHER'S CLUE...

"Every level has different neighbours."

GRANDFATHER

PENTHOUSE

Top of the tree



FLOOR 4

Upper Branches

4.

FLOOR 3

Medium Branch
Hollows

3.

SIDE APARTMENT

Peeling Bark &
Cracks

2.

GROUND FLOOR

Base of the
trunk & roots

1.

YOUR CHALLENGE

Can you explore every part of this bush high-rise?

- ☐ Count all the animals you can find.
- ☐ Hunt for the two hidden homes that aren't on the floor plan.
- ☐ Who do you think lives there?

Bushland Detective

1. The Ecosystem Connection:

If this habitat tree is cut down to build a new road, how many animals lose their home?

Answer: _____

2. Choose a Floor:

If you could live in this tree, which floor would you choose and why?

Grandfather's Wisdom

"When one old tree falls, an entire neighbourhood disappears!"



GRANDFATHER



CLASSROOM ACTIVITY:

Draw your own "Bushland High-Rise" poster! Add as many animals as you can that might live in an old habitat tree.

DID YOU KNOW?

Weather, fungi and insects slowly help old trees develop hollows that become homes for wildlife.



MISSION 3

THE BUSHLAND BUFFET

Carly's Amazing Bushland Multi-Tool

MISSION BRIEF:

How does Carly crack one of the toughest nuts in the bush?

Imagine trying to crack open a Marri nut (gum nut) with your teeth! Luckily, Carly has something much better - a powerful beak and a clever tongue that work together nature's own multi-tool."

Grandfather's Wisdom

"You don't need teeth when you've got the perfect tool!"

CARLY'S TOOL KIT

1. UPPER BEAK

Hook & Hold

Locks onto the nut and holds it steady.

2. TONGUE

Built-in Spoon

Scoops out every tasty seed.

3. LOWER BEAK

The Chisel

Cuts and shaves through the tough shell.



BUSHLAND DETECTIVE

Which foot does Carly use to hold her nut?

Did you know most Carnaby's Black Cockatoos have a favourite foot?

Watch a video or look at a photo to find the secret clue. Which foot does Carly use to hold her food? Tick your guess below!



BUSHLAND MYSTERY

WHO ATE THIS NUT?

Every chewed nut tells a story!

Look closely at the two Marri nuts (or gum nuts). Can you match each nut to the bird that chewed it?



A Red-capped Parrot

B Carnaby's Black Cockatoo

Grandfather's Wisdom

"Every chewed Marri nut is a clue. Scientists can identify the bird just by studying the bite marks!"

GRANDFATHER

TRY IT LIKE CARLY!

Pretend you're Carly!

Scrunch a small piece of paper into a ball. Hold it with one hand and pretend to crack it open with the other.

Was it easier with your left or right hand?

Tick which hand felt easier?

☐ Left

☐ Right



REAL BUSH SCIENCE

After feeding, Carnaby's Black Cockatoos often leave chewed Marri nuts beneath the tree.

These leftovers help scientists discover which birds have been visiting an area.

MISSION 4

THE HOUSING CRISIS

Why Safe Homes Are Disappearing



Old trees are being lost

Roads, farms, mining and housing remove ancient habitat trees that take hundreds of years to develop hollows.

HABITAT LOSS

Another old tree was cleared to make way for development.

FIRE DAMAGE

A hot bushfire can destroy old hollow-bearing trees.

Its nesting hollow is exposed and no longer safe for wildlife.

CHANGING CLIMATE

Long, hot, dry summers make food harder to find and slow the growth of young trees.

HOLLOW CLUES

Scientists don't just look at the outside of a hollow... they also ask:

- Is it deep?
- Is it sheltered?
- Is it already occupied?

FERAL EUROPEAN HONEYBEES

A swarm has moved into this crack and built a hive inside.

Carly can't use it as a safe nest.

CORELLAS & GALAHS

These noisy birds arrive in large flocks and take over hollows for nesting.

CAN YOU HELP CARLY FIND A HOME?

1. Look carefully at the tree above.

Inspect all the hollows and cracks. Find the one hollow that isn't blocked by bees, already occupied, or damaged by fire. Which hollow is perfectly safe for Carly to lay her eggs?

Answer: _____

2. Why can't Carly simply move into a young, fast-growing tree nearby?

Answer: _____

DID YOU KNOW?

Not all bees are the same!

Australia's native bees help pollinate bush flowers.

The problem for Carly is that feral European honeybees take over tree hollows needed for nesting.

Grandfather's Wisdom

"When people protect old trees and plant new ones, they're building homes for the future generations of wildlife."

GRANDFATHER

BUSHLAND HEROES

People are helping by:



Planting native trees



Protecting old hollow trees



Installing Cockatubes



Providing water during summer



Carnaby's Black Cockatoos are **ENDANGERED**. Every old tree we protect gives Carnaby's Black Cockatoos a better chance of surviving.

MISSION 5

Become a Bushland Guardian

Your Mission Starts Here!



Grandfather's Wisdom

"You've learnt Carly's story.

Now it's your turn to become
a Bush Detective.

The best detectives don't just
look...

They notice.

What will you discover
today?"



Can you spot these?



1. An old
hollow tree.



2. Chewed Marri
nuts.



3. Native bee
visiting a
Banksia flower.



4. A Cockatube
(nest tube).

BUSH DETECTIVE CHALLENGE



PROTECT

Old hollow
trees.



NOTICE

Signs of
wildlife.



GROW

Native trees.



SHARE

Carly's story.

YOUR FIELD MISSION!

The next time you visit the bush...
can you find something new that
we haven't talked about?

Draw it here!



MY NEXT WALK

In the bush, I hope to spot...

EYE SPY CHALLENGE

Can you find them in the picture?

- ☐ I found something nobody else noticed!
- ☐ I spotted a skink.
- ☐ I found a feather.
- ☐ I spotted two chicks.
- ☐ I found a banksia.
- ☐ I found Marri nuts.



GUARDIAN PROMISE

- ☒ I will protect old trees.
- ☒ I will plant native trees.
- ☒ I will leave water out on hot days.
- ☒ I will help others learn why old trees matter.

Signed: _____

Date: _____

CONGRATULATIONS!

You're one step closer to becoming a



BUSHLAND GUARDIAN!



Every **BUSHLAND GUARDIAN** helps give Carnaby's Black Cockatoos a brighter future.

Help Carly Find Her Way!

Can you guide Carly to a safe nesting hollow?

Choose the safest path.

Watch out for the obstacles!



START

SAFE
HOLLOW

OLD TREE GONE
No nesting
hollow here.



COCKATUBE

Helping wildlife.
Good choice!



GALAHS

This spot is
taken!



BULLDOZER

Habitat lost!
No safe way



FERAL BEES

Have built their hive
here! Go another way



BURNT TREE

Recently burnt.
Go back!



BANKSIA

Native food!
You're close!



GRANDFATHER

GRANDFATHER WISDOM

"Sometimes the
safest path isn't the
quickest one."

BUSH DETECTIVE
CHALLENGE

- a skink
- two eggs
- a feather
- a nest
- a bee
- a ladybird



CHALLENGE 2

GRANDFATHER'S FINAL CHALLENGE.

Grandfather says...

You've learnt so much
about helping
Carnaby's Black Cockatoos.

If you could do ONE
thing to help them,
what would it be? ♡



OFFICIAL BUSHLAND GUARDIAN!

- ☐ Mission 1: The Ancient Tree
- ☐ Mission 2: The Bush High-Rise
- ☐ Mission 3: The Bushland Buffet
- ☐ Mission 4: The Housing Crisis
- ☐ Mission 5: Become a Bushland Guardian
- ☐ Challenge 1: Help Carly Find Her Way
- ☐ Challenge 2: Grandfather's Final Challenge

You've earned your badge! ♡

Name: _____

Date: _____



Mission Complete! You've earned your Bushland Guardian badge.

Congratulations, Bushland Guardian! ♡

The bush needs people like you.



Answer Key — Mission 3: The Bushland Buffet

A short reference insert so teachers can mark or discuss Mission 3's two open-ended quizzes without needing outside research.

Quiz 1: "Which Foot Does Carly Use?"

Answer: Left foot

Why?

- Black cockatoos are usually left-footed.
- Scientists think this is similar to human handedness.
- One side of the brain helps manage feeding while the other stays alert.

Studies of black cockatoos, including Carnaby's and red-tailed black cockatoos, show a strong preference for using the left foot while feeding.

You could say:



"Many cockatoos show a strong preference for using their left foot when feeding. Scientists think this is because their brains divide jobs between the left and right side, a bit like how some people are left or right-handed."

Quiz 2: "Who Ate This Nut?"

Answer: Identification Guide

Species	Bite style	Chewed nut appearance
Carnaby's Black Cockatoo	Chews and breaks apart the rim of the Marri nut to reach the seeds.	Notched, broken rim; body of the nut largely remains intact.
Red-capped Parrot	Leaves many fine beak marks around the neck below the rim while holding the Marri nut, then removes the seeds through the top opening.	Fine, clustered beak marks around the neck below the rim; body of the nut largely remains intact.

You could say:



"Real ecologists identify which cockatoo species visited an area just by studying chewed nuts on the ground, without seeing the bird itself! It's a genuine field technique used in Western Australian bushland surveys. Even Carly's own species leaves a different signature bite than her red-tailed cousins!"

These notes are designed to support discussion. Encourage students to observe carefully, ask questions and explain their thinking, even when activities have more than one possible answer.



Carly's Fascinating Facts

1. They only live in one part of the world

Carnaby's Black Cockatoos are found only in the south-west of Western Australia. That makes them a very special bird that exists nowhere else on Earth.

2. Their homes take centuries to make

They don't build nests like many birds. Instead, they rely on natural hollows in very old eucalypt trees. Large hollows suitable for Carnaby's often take 200–300 years or more to develop, which is why old trees are so important.

3. They usually raise just one chick

Although females often lay two eggs, there is usually only enough food to successfully raise one chick. The stronger chick is normally the one that survives.

4. They form long-term partnerships

Carnaby's cockatoos generally mate for life. Parents work together, with the male bringing food to the female while she incubates the eggs and cares for the chick.

5. They travel enormous distances

A flock may fly tens of kilometres every day searching for food, water and safe places to rest. They migrate between their breeding areas in the Wheatbelt and feeding areas closer to the coast.

6. They're expert seed crackers

Their powerful beaks can split open the tough seed cones of banksias, hakeas and marri trees. In suburbs they also enjoy macadamias and almonds when available.

7. You can tell males and females apart

Male: black bill with a pink eye ring.

Female: pale grey bill and a lighter eye ring, often with a slightly brighter white cheek patch.

8. They're known as the "rain bird"

Many Western Australians call them the rain bird because they often appear as the wetter months approach, and the timing of their breeding is linked to autumn rainfall.

9. Their call is unforgettable

Their loud, wailing "wy-lah" or "wee-loo" call can be heard long before you see them. For many people in Perth, hearing that call is one of the sounds that defines winter.





10. They once blackened the sky

Early settlers described flocks so enormous they "blackened the sky." Today, because of habitat loss, those huge flocks are rarely seen.

11. They live a long time

Carnaby's Black Cockatoos can live 35 years or more in the wild, with some individuals documented into their mid-30s. Because they raise so few chicks, they depend on living a long life to replace the population.

12. Every old tree is like an apartment building

One old hollow tree may provide homes for cockatoos, owls, possums, parrots, bats, reptiles, insects and native bees. Losing one tree can mean losing homes for many different animals—not just the cockatoos.

13. Children really can help

Simple actions make a difference:

- Plant native banksias, hakeas and marri.
- Keep birdbaths filled with fresh water in summer.
- Protect old trees whenever possible.
- Tell others why hollow trees matter.

The fact that amazes most people is this:

A Carnaby's chick may hatch in a hollow that began forming before Australia was even settled by Europeans.

That's because the tree itself may be several hundred years old before it develops a hollow large enough for a Carnaby's family. It really helps children understand why, as Grandfather says in Carly, "Finding a safe home isn't easy anymore."

